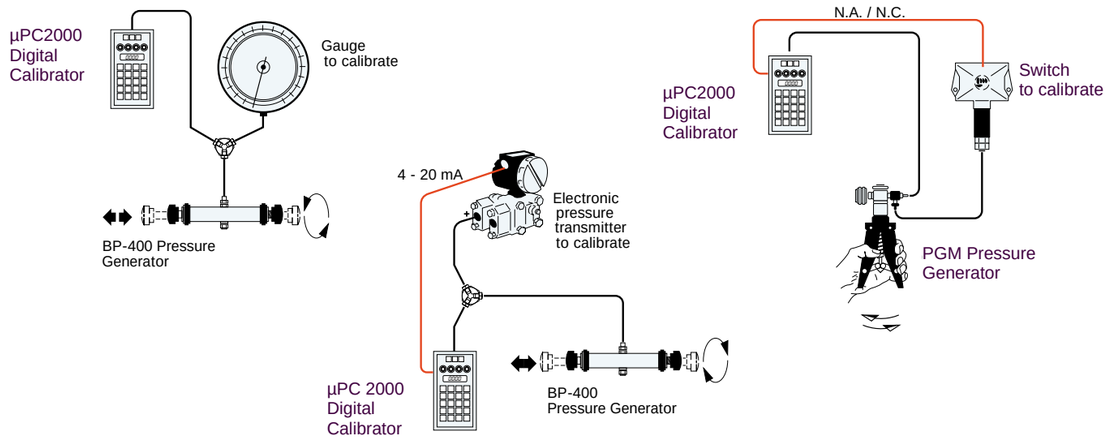
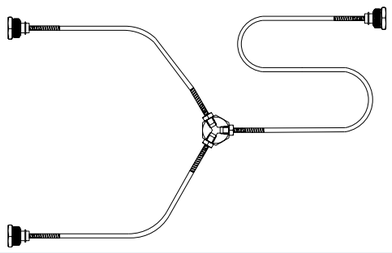
## Operating Diagram




## Accessories

### Pneumatic Accessories (max. 20 bar)

| | Reference | Description |
|---|---|---|
| ○ | RB400BP11 | 750 mm connection hoses with two 500mm extensions |



| | Reference | Description |
|---|---|---|
| ● | RB400BP22 | 750 mm connection hoses |

| | Reference | Description |
|---|---|---|
| ● | RS20012G | 1/8" BSPM 60º cone connector for both ends |
| ○ | RS20012 | 1/8" NPTM connector for 1/8" BSPM 60º cone |
| ○ | RS20014 | 1/4" NPTM connector for 1/8" BSPM 60º cone |
| | RS20016 | 3/8" NPTM connector for 1/8" BSPM 60º cone |
| | RS20018 | 1/2" NPTM connector for 1/8" BSPM 60º cone |
| | RS20012RG | 1/8" BSPM connector for 1/8" BSPM 60º cone |
| | RS20014RG | 1/4" BSPM connector for 1/8" BSPM 60º cone |
| | RS20016RG | 3/8" BSPM connector for 1/8" BSPM 60º cone |
| | RS20018RG | 1/2" BSPM connector for 1/8" BSPM 60º cone |
| | RBQSF612 | 1/8" BSPH quick-fit connector for 6 mm hose |
| | U10351620 | USIT Ring for 1/8" BSPM threads |

| Kits | |
|---|---|
| ○ | **RB400BP01 Calibration Kit including:**<br>**- RB400BP11 - RS20012 - RS20014** |
| ● | **RB400BP02 Extension Kit including:**<br>**- RB400BP22 - RS20012G** |

### High Pressure Accessories (up to 600 bar and 1000 bar)

| Reference | Description |
|---|---|
| | Accessories up to 600 bar |
| V6006022 | Connection hose 750 mm long x 6 mm diameter |
| V60018NPT6 | 1/8"NPTM High pressure fitting |
| V60018BSP6 | 1/8" BSPM High pressure fitting |
| V60014NPT6 | 1/4" NPTM High pressure fitting |
| V60014BSP6 | 1/4" BSPM High pressure fitting |
| V60038NPT6 | 3/8" NPTM High pressure fitting |
| V60038BSP6 | 3/8" BSPM High pressure fitting |
| RS4TG | 1/4" BSPH Tee adaptor |
| RS8RB4G | 1/2" BSPM to 1/4" BSPH adaptor |
| RS40012GG | 1/8" BSPH x 1/8" BSPH adaptor for both ends |
| U10351620 | 1/8" BSPM USIT Ring |
| U13702015 | 1/4" BSPM USIT Ring |
| U16702415 | 3/8" BSPM USIT Ring |
| U20702815 | 1/2" BSPM USIT Ring |

| Accesories up to 1000 bar (stainless steel) | | |
|---|---|---|
| HK1-1000 | Sl Stainless Steel High Pressure Kit including: | |
| 01-0706 | 1 mt flexible hose | |
| 01-0707 | 1/4" BSPM connector | |
| 01-0708 | 1/4" BSPH connector | |
| HTPA-1000 | Sl kit with 7 stainless steel adaptors including: | |
| | 1/4" BSPM x 1/8" BSPH | 1/4" BSPM x 3/8" BSPH |
| | 1/4" BSPM x 1/2" BSPH | 1/4" BSPM x 1/8" NPTH |
| | 1/4" BSPM x 1/4" NPTH | 1/4" BSPM x 3/8" NPTH |
| | 1/4" BSPM x 1/2" NPTH | |



# Pressure Calibrator

## µPC2000

## Description

The new µPC2000 calibrator series has been designed for GOMETRICS with the same criteria of reliability and operativity of the popular handheld digital manometer DPM-6100, besides it has been integrated with all the key functions necessary to guarantee the best calibration performances both in the field and in the lab quickly, safely and successfully.

µPC2000 is keyboard configurable, allowing to program 0% and100% of input pneumatic signals, in order to work with gauge values or percentages thus saving time in performing your tests. What's more, you can use your µPC2000 calibrator to carry out percentage error readings (E %) which avoids the need of boring and tedious calculations since the calibrator can automatically calculate the percentage deviation of output signal from the device currently under calibration

µPC2000 can be supplied with 1 or 2 internal pressure modules and 1 barometric module (optional), allowing to use it immediately with the required sensors or you can upgrade lt later on according to your requirements and new oppèrtunities.

## Other calibrator functions

- Autozero (pressure sensor)
- 24V DC built-in source for loop supply
- Data Storage
- Switching detection (pressure switches)
- Percentage indication of battery state
- RS232 Interface
- Conversion of engineering units by keyboard, 12 units
- Software for data download
- User Manual
- Calibration of linear or quadratic transmitters
- Tare Function

## Technical Features

- Ranges : Accuracy: see table II
  Current: -30 / 0 / +30 mA (input impedance: 5 ohm)
  Voltage: -15 / 0 / +15 VDC (impedance: > 1 Mohm)
- Pressure sensors: 1 or 2 (see table I)
- Barometric sensor: (optional). Complement to 1 or 2 pressure sensors
- Uncertainty: includes non-linearity, hysteresis, repeatibility, thermal drift between 20ºC and 26ºC and 1 year stability
  Pressure : see table II
  Barometric module : 1 mbar
  Current : 0,02% rdg + 2 µA
  Voltage : 0,02% rdg + 2 mV
- Resolution: Pressure: see table II :
  Current : 0,001 mA
  Voltage : 0,001 V
- Thermal Drift: 0,01% FS/ ºC (ranges < 1 bar)
  0,005% FS/ ºC (ranges ≥ 1 bar)
- Pressure media: compatible with AISI 316 (ranges > 300 mbar) air or inert gas (ranges ≤ 300 mbar)
- Pressure connection: 1/8" BSPM 60º internal cone (see accessories table)
- Electrical connection: 4 mm banana jack
- Overload pressure: 2 times the rated range
- Up to 12 engineering units
- Operating Temperature: 0°C to 50°C
- 2 lines x16 characters back-lit display
- Power supply: battery pack (ref. HG1800AA4BMJ)
- Battery charger supply: 220V 50Hz
- Battery life: 16 hours without loop supply, 8 hours with 12mA loop supply
- Pressure switch state: open/close status of potential-free contact
- External sensor: AISI 316. 1/4"BSPM connection. 1mt cable
- Dimensions: 100mmx200mmx45mm
- Weight: 600g
- Warranty: 2 years
- CE Marked

## µPC2000 Calibrator standard package includes:

- Battery pack and power supply
- Cables and carrying case
- Two 1/8" BSP quick-fit connectors and ring for 6mm hose
- RS-232 communication cable (1,8 mt)
- Data download software
- ENAC calibration certificate
- User Manual

## Model Description

1. Designate basic model according to table I : µPC2210 (Calibrator with 2 sensors and 1 barometric module)
2. Designate sensors according to table II INT201G2 (Internal sensor. 0-2 bar gauge range. Uncertainty 0,1% FS)
   INT701E2 (Internal sensor. –1 / +7 bar combined range. Uncertainty. 0,1% FS)

## Basic Model Definition (table I)

| Model | Sensor 1 (P1 ) | Sensor 2 (P2 ) | Barometric |
|---|---|---|---|
| µPC 2000 | No | No | No |
| µPC 2100 | Yes | No | No |
| µPC 2200 | Yes | Yes | No |
| µPC 2010 | No | No | Yes |
| µPC 2110 | Yes | No | No |
| µPC 2210 | Yes | Si | Yes |

mbar bar

## Designation of sensors,ranges,uncertainties and resolution (table II)

| Sensor Code (*) | | Ranges according to input mode | | | Resolution |
|---|---|---|---|---|---|
| Uncertainty (% FS) | | Gauge (G) | Combined (E) | Absolute (A) | |
| 0,1% | 0,05% | | | | |
| INT025X2 | . | 0-25 | -25/+25 | . | 0,001 |
| INT070X2 | . | 0-70 | -70/+70 | . | 0,002 |
| INT300X2 | INT300X3 | 0-300 | -300/+300 | . | 0,01 |
| INT101X2 | INT101X3 | 0-1 | -1/+1 | 0-1 abs (**) | 0,00002 |
| INT201X2 | INT201X3 | 0-2 | -1/+2 | 0-2 abs (**) | 0,0005 |
| INT701X2 | INT701X3 | 0-7 | -1/+7 | 0-7 abs (**) | 0,0002 |
| INT172G2 | INT172G3 | 0-17 | - | . | 0,0005 |
| INT352GS | INT352G3 | 0-35 | - | . | 0,001 |
| INT702G2 | INT702G3 | 0-70 | - | . | 0,002 |
| INT173G2 | INT173G3 | 0-170 | - | . | 0,005 |
| INT353G2 | INT353G3 | 0-350 | - | . | 0,01 |
| B | . | - | - | 0,8-1,2 abs | 0,00002 |

(**) Available only with 0,1% FS uncertainty

(*) Replace X of sensor code with: G - Gauge
E - Combined (vacuum-pressure)
A - Absolute

**Note:** When ordering external modules replace INT of sensor code with XPM

Example: INT 173 G2 (0-170 bar internal sensor)
XPM 173 G2 (0-170 bar external sensor)